

Abstract of the Disclosure

A wireless mobile communication network allows mobile nodes, such as cellular telephone, and other types of mobile transceivers, to communicate with a fixed base station and directly with one another. This mobile to mobile communication capability is exploited through the formation of a local link where nodes with excess processing and bandwidth capacity forward messages at the request of the base station. The formation of the local link is adaptive and does not require a central controller. The wireless mobile network includes a base station and mobile nodes. Nodes are configured as major nodes when they communicate information directly with the base station via a network link. Nodes are configured as minor nodes when they communicate the information indirectly with the base station via a direct local link with one of the major nodes to form a locally linked mobile network within the wireless mobile communications network. Each mobile node includes a header detector, coupled to a receiver and a decoder of the node to detect a header in a frame used to communicate the information, and a message processor, coupled to the header detector and a transmitter, to route the frame to the minor node.